

*I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:*

METHOD FOR INHIBITING THROMBOSIS IN A PATIENT WHOSE BLOOD IS SUBJECTED TO EXTRACORPOREAL CIRCULATION

*the specification of which:  
(check one)*

\_\_\_\_\_ is attached hereto.  
 X \_\_\_\_\_ was filed on April 1, 1998 \_\_\_\_\_ as  
 Application Serial No. 09/053,872 \_\_\_\_\_  
 and was amended \_\_\_\_\_  
 (if applicable)

*I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.*

*I acknowledge the duty to disclose to the U.S. Patent and Trademark Office all information known to me to be material to patentability as defined in Title 37, Code of Federal Regulations, Section 1.56.*

*I hereby claim foreign priority benefits under Title 35, United States Code, Section 119 (a)-(d) or Section 365(b) of any foreign application(s) for patent or inventor's certificate, or Section 365(a) of any PCT International Application which designated at least one country other than the United States, listed below. I have also identified below any foreign application for patent or inventor's certificate, or PCT International Application having a filing date before that of the earliest application from which priority is claimed:*

*Prior Foreign Application(s)*

**Priority Claimed**

[illegible]

Eric Rose et al.  
U.S. Serial No.: 09/053,872  
Filed: April 1, 1998  
*Declaration and Power of Attorney*

Page 2

*I hereby claim the benefit under Title 35, United States Code, Section 119(e) of any United States provisional application(s) listed below:*

<u>Provisional Application No.</u>	<u>Filing Date</u>	<u>Status</u>
<u>None</u>	<u></u>	<u></u>
<u></u>	<u></u>	<u></u>
<u></u>	<u></u>	<u></u>
<u></u>	<u></u>	<u></u>
<u></u>	<u></u>	<u></u>

*I hereby claim the benefit under Title 35, United States Code, Section 120 of any United States Application(s), or Section 365(c) of any PCT International Application(s) designating the United States listed below. Insofar as this application discloses and claims subject matter in addition to that disclosed in any such prior Application in the manner provided by the first paragraph of Title 35, United States Code, Section 112, I acknowledge the duty to disclose to the United States Patent and Trademark Office all information known to me to be material to patentability as defined in Title 37, Code of Federal Regulations, Section 1.56, which became available between the filing date(s) of such prior Application(s) and the national or PCT international filing date of this application:*

<u>Application Serial No.</u>	<u>Filing Date</u>	<u>Status</u>
<u>08/648,561</u>	<u>May 16, 1996</u>	<u>Pending</u>
<u>PCT/US97/08282</u>	<u>May 15, 1997</u>	<u>Pending</u>
<u></u>	<u></u>	<u></u>
<u></u>	<u></u>	<u></u>
<u></u>	<u></u>	<u></u>
<u></u>	<u></u>	<u></u>

*And I hereby appoint*

John P. White (Reg. No. 28,678); Christopher C. Dunham (Reg. No. 22,031); Norman H. Zivin (Reg. No. 25,385); Jay H. Maioli (Reg. No. 27,213); William E. Pelton (Reg. No. 25,702); Robert D. Katz (Reg. No. 30,141); Peter J. Phillips (Reg. No. 29,691); Wendy E. Miller (Reg. No. 35,615); Richard S. Milner (Reg. No. 33,970); Albert Wai-Kit Chan (Reg. No. 36,479); Robert T. Maldonado (Reg. 38,232); Mary Anne P. Tanner (Reg. No. 40,197); Paul Teng (40,837); Gerard M. Wissing (Reg. No. 36,309); George M. MacDonald (Reg. No. 39,284); Richard F. Jaworski (Reg. No. 33,515); Elizabeth M. Wieckowski (Reg. No P-42,226); Victor Devito (Reg. No. 36,325); Pedro C. Fernandez (Reg. No. P-41,741); William D. DeVaul (Reg. No. P-42,483); Todd A. Holmbo (Reg. No. P-42,665); and Steven J. Lieb (Reg. No. P-41,943)

*and each of them, all c/o Cooper & Dunham LLP, 1185 Avenue of the Americas, New York, New York 10036, my attorneys, each with full power of substitution and revocation, to prosecute this application, to make alterations and amendments therein, to receive the patent, to transact all business in the Patent and Trademark Office connected therewith and to file any International Applications which are based thereon under the provisions of the Patent Cooperation Treaty.*

• Eric Rose et al.  
• U.S. Serial No.: 09/053,872  
Filed: April 1, 1998

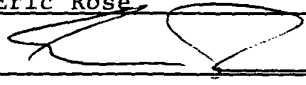
*Declaration and Power of Attorney*

Page 3

*Please address all communications, and direct all telephone calls, regarding this application to:*

John P. White Reg. No. 28,678  
Cooper & Dunham LLP  
1185 Avenue of the Americas  
New York, New York 10036  
Tel. (212) 278-0400

*I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.*

Full name of sole or  
first joint inventor Eric Rose  
Inventor's signature   
Citizenship United States of America Date of signature 4/30/98  
Residence 96 Oxford Drive, Tenafly, New Jersey 07670  
Post Office Address Same as residence

Full name of joint  
inventor (if any) David Stern  
Inventor's signature David Stern  
Citizenship United States of America Date of signature 4/30/98  
Residence 63 Tanners Road, Great Neck, New York 11020  
Post Office Address Same as residence

Full name of joint  
inventor (if any) Ann Marie Schmidt  
Inventor's signature Ann Marie Schmidt  
Citizenship United States of America Date of signature 4/30/98  
Residence 242 Haven Road, Franklin Lakes, New Jersey 07417  
Post Office Address Same as residence

Erić Rose et al.


U.S. Serial No.: 09/053,872

Filed: April 1, 1998

Page 4

*Declaration and Power of Attorney*

Full name of joint  
inventor (if any) Talia Spanier

Inventor's signature  5/20/98

Citizenship United States of America Date of signature \_\_\_\_\_

Residence 600 West 111th Street, Apt. 4-C, New York, New York 10025

Post Office Address Same as residence

Applicant or Patentee: Eric Rose et al. Attorney's 50634/JPW/JM  
Serial or Patent No.: Not Yet Known Dock t No: \_\_\_\_\_  
Filed or Issued: Herewith  
Title of Invention or Patent: METHOD FOR INHIBITING THROMBOSIS IN A PATIENT WHOSE  
BLOOD IS SUBJECTED TO EXTRACORPOREAL CIRCULATION

VERIFIED STATEMENT (DECLARATION) CLAIMING  
SMALL ENTITY STATUS UNDER 37 C.F.R. §1.9(f)  
AND §1.27(d) - NONPROFIT ORGANIZATION

I hereby declare that I am an official empowered to act on behalf of the nonprofit organization identified below:

Name of Organization: The Trustees of Columbia University in the City of New York

Address of Organization: 110 Low Memorial Library, West 116th & Broadway  
New York, New York 10027

TYPE OF ORGANIZATION:

☒ UNIVERSITY OR OTHER INSTITUTION OF HIGHER EDUCATION  
TAX EXEMPT UNDER INTERNAL REVENUE SERVICE CODE 26 U.S.C. §§501(a) and 501(c)(3)  
NONPROFIT SCIENTIFIC OR EDUCATIONAL UNDER STATUTE OF STATE OF THE UNITED STATES OF AMERICA  
NAME OF STATE: \_\_\_\_\_  
CITATION OF STATUTE: \_\_\_\_\_  
WOULD QUALIFY AS TAX EXEMPT UNDER INTERNAL REVENUE SERVICE CODE 26 U.S.C. §§501(a) and 501(c)(3) IF LOCATED IN THE UNITED STATES OF AMERICA  
WOULD QUALIFY AS NONPROFIT SCIENTIFIC OR EDUCATIONAL UNDER STATUTE OF STATE OF THE UNITED STATES OF AMERICA IF LOCATED IN THE UNITED STATES OF AMERICA  
NAME OF STATE: \_\_\_\_\_  
CITATION OF STATUTE: \_\_\_\_\_

I hereby declare that the nonprofit organization identified above qualifies as a nonprofit organization as defined in 37 C.F.R. §1.9(e)\* for purposes of paying reduced fees under 35 U.S.C. §41(a) and 41(b), with regard to the invention entitled METHOD FOR INHIBITING THROMBOSIS IN A PATIENT WHOSE BLOOD IS SUBJECTED TO EXTRA-  
CORPOREAL CIRCULATION

by inventor(s) Eric Rose, David Stern, Ann Marie Schmidt and Talia Spanier  
described in:

☒ the specification filed herewith  
application serial no. \_\_\_\_\_ filed \_\_\_\_\_  
patent no. \_\_\_\_\_ issued \_\_\_\_\_

I hereby declare that rights under contract or law have been conveyed to and remain with the nonprofit organization with regard to the above identified invention.

If the rights held by the nonprofit organization are not exclusive each individual, concern, or organization known to have rights to the invention is listed below<sup>a</sup> and no rights to the invention are held by any person, other than the inventor, who could not qualify as a small business concern under 37 C.F.R. §1.9(d)\* or a nonprofit organization under 37 C.F.R. 1.9(e)\*

<sup>a</sup>NOTE: Separate verified statements are required from each person, concern, or organization having rights to the invention averring to their status as small entities. 37 C.F.R. §1.27.

Name: NONE

Address: \_\_\_\_\_

☐ Individual ☐ Small Business Concern ☐ Nonprofit Organization

\*See Reverse

Eric Rose et al.

Small Entity/Nonprofit

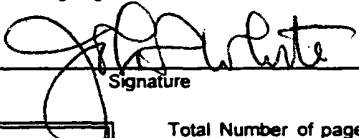
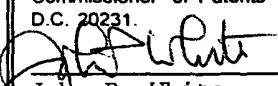
Page -2-

I acknowledge the duty to file, in this application or patent, notification of any change in status resulting in loss of entitlement to small entity status prior to paying, or at the time of paying, the earliest of the issue fee or any maintenance fee due after the date on which status as a small entity is no longer appropriate. 37 C.F.R. §1.28(b)\*.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. §1001, and that such willful false statements may jeopardize the validity of the application, any patent issuing thereon, or any patent to which this verified statement is directed.

Name of Person Signing: Mr. Jack M. Granowitz  
Title In Organization: Executive Director, Columbia Innovation Enterprise  
Address: Columbia University, Engineering Terrace - Suite 363  
West 120th Street and Amsterdam New York, New York 10027  
Signature: Jack M. Granowitz  
Date Of Signature: April 26, 1995

\*See Reverse

FORM PTO-1595 (Substitute) (Rev. 8-96)	RECORDATION FORM COVER SHEET <b>PATENTS ONLY</b>	U.S. DEPARTMENT OF COMMERCE Patent and Trademark Office
To the Honorable Commissioner of Patents and Trademarks. Please record the attached original documents or copy thereof.		
1. Name of conveying party(ies): Eric Rose, Talia Spanier David Stern, Ann Marie Schmidt,  Additional name(s) of conveying party(ies) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	2. Name and address of receiving party(ies): The Trustees of Columbia University Name: <u>In The City of New York</u>  Internal Address: _____ Street Address: <u>West 116th Street &amp; Broadway</u>  City/State/Zip: <u>New York, New York 10027</u>  Additional name(s) & address(es) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
3. Nature of Conveyance:  <input checked="" type="checkbox"/> Assignment <input type="checkbox"/> Merger <input type="checkbox"/> Security Agreement <input type="checkbox"/> Change of Name <input type="checkbox"/> Other _____  Execution Date(s): <u>April 30, 1998, May 20, 1998</u>	4. Application number(s) or patent number(s): If this document is being filed together with a new application, the execution date(s) of the application is(are): <u>April 30, 1998, May 20, 1998</u>  A. Patent Application No.(s) <u>09/053,872</u> <u>filed April 1, 1998</u>  B. Patent No.(s) _____  Additional numbers attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
5. Name and address of party to whom correspondence concerning document should be mailed:  Name: <u>John P. White, Esq.</u>  Internal Address: _____ Street Address: <u>Cooper &amp; Dunham LLP</u> <u>1185 Avenue of the Americas</u>  City/State/Zip: <u>New York, New York 10036</u>	6. Total number of applications and patents involved: <u>1</u>  7. Total fee (37 CFR §3.41): ..... \$ <u>40.00</u>  <input type="checkbox"/> Enclosed <input checked="" type="checkbox"/> Authorized to be charged to deposit account  8. Deposit account number: <u>03-3125</u>	
<b>DO NOT USE THIS SPACE</b>		
9. Statement and signature.  To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.  <div style="display: flex; justify-content: space-between;"> <div style="width: 30%;"> <u>John P. White</u>              Name of Person Signing           </div> <div style="width: 30%; text-align: center;">               Signature           </div> <div style="width: 30%; text-align: right;"> <u>July 17, 1998</u>              Date           </div> </div> <div style="border: 1px solid black; padding: 5px; width: fit-content;">             I hereby certify that this correspondence is being deposited this date with the U.S. Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner of Patents and Trademarks, Washington, D.C. 20231.  <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div>   <u>John P. White</u>              Registration No. 28,678           </div> <div style="text-align: right;"> <u>7/17/98</u>              Date           </div> </div> </div> Total Number of pages including cover sheet, attachments and document: <u>4</u>		
OMB No. 0651-0011 (exp. 4/94) Mail documents to be recorded with required cover sheet information to: Commissioner of Patents and Trademarks Box Assignments Washington, D.C. 20231		

## Assignment

*In consideration of One Dollar (\$1.00), and other good and valuable considerations, the receipt of which is hereby acknowledged, we, the undersigned, Eric Rose, David Stern, Ann Marie Schmidt, and Talia Spanier of 96 Oxford Drive, Tenafly, New Jersey 07670; 63 Tanners Road, Great Neck, New York 11020; 242 Haven Road, Franklin Lakes, New Jersey 07417; and 600 West 111th Street, Apartment 4-C, New York, New York 10025, respectively,*

*Hereby sell, assign and transfer to The Trustees of Columbia University in the City of New York*

*a corporation of the State of*

*New York, New York, having a place of business at West 116th Street & Broadway, New York, New York 10027, U.S.A. in the County of New York and State of New York*

*its successors, assigns and legal representatives, the entire right, title and interest for all countries, in and to any and all inventions which are disclosed and claimed, and any and all inventions which are disclosed but not claimed, in the application for United States Patent, which has been executed by the undersigned on April 30, and May 20, 1998 and is entitled*

*METHOD FOR INHIBITING THROMBOSIS IN A PATIENT WHOSE BLOOD IS SUBJECTED TO EXTRACORPOREAL CIRCULATION*

*(U.S. Serial No. 09/053,872, filed April 1, 1998)*

*and in and to said application and all divisional, continuing, substitute, renewal, reissue, and all other applications for U.S. Letters Patent or other related property rights in any and all foreign countries which have been or shall be filed on any of said inventions disclosed in said application; and in and to all original and reissued patents or related foreign documents which have been or shall be issued on said inventions;*


*Authorize and request the Commissioner of Patents of the United States to issue to said Assignee, the corporation above named, its successors, assigns and legal representatives, in accordance with this assignment, any and all United States Letters Patent on said inventions or any of them disclosed in said application;*



Filed: April 1, 1998

Agree that said Assignee may apply for and receive foreign Letters Patent or rights of any other kind for said inventions, or any of them; and may claim, in applications for said foreign Letters Patent or other rights, the priority of the aforesaid United States patent application under the provisions of the International Convention of 1883 and later modifications thereof, under the Patent Cooperation Treaty, under the European Patent Convention or under any other available international agreement; and that, when requested, without charge to, but at the expense of, said Assignee, its successors, assigns and legal representatives, to carry out in good faith the intent and purpose of this assignment, the undersigned or the undersigned's executors or administrators will, for the United States and all foreign countries, execute all divisional, continuing, substitute, renewal, reissue, and all other patent applications or other documents on any and all said inventions; execute all rightful oaths, assignments, powers of attorney and other papers; communicate to said Assignee, its successors, assigns and representatives, all facts known and documents available to the undersigned relating to said inventions and the history thereof; testify in all legal proceedings; and generally do everything possible which said Assignee, its successors, assigns or representatives shall consider desirable for aiding in securing, maintaining and enforcing proper patent protection for said inventions and for vesting title to said inventions and all applications for patents or related foreign rights and all patents on said inventions, in said Assignee, its successors, assigns and legal representatives; and

**Covenant** with said Assignee, its successors, assigns and legal representatives that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been made to others by the undersigned, and that full right to convey the same as herein expressed is possessed by the undersigned.

Date: 4/30 1998Witness: Mary Lewis  
MARY LEWIS  
667 Vanderbilt Ave  
BROOKLYN, NY 11238  
\_\_\_\_\_  
Eric Rose [L.S.]Date: April 30 1998Witness: Mary Lewis  
MARY LEWIS  
667 VANDERBILT AVE  
BROOKLYN, NY 11238David Stern  
\_\_\_\_\_  
David Stern [L.S.]

Eric Rose et al.  
U.S. Serial No.: 09/053,872  
Filed: April 1, 1998

Page 3

Ann Marie Schmidt

L.S.

Ann Marie Schmidt

Date: 4/30/98 19

Witness: Mary J. Lewis  
Mary I. Lewis  
667 Vanderbilt Avenue  
Brooklyn, N.Y. 11238

Talia Spanier

L.S.

Talia Spanier

Date: 5/20/98 19

Witness: Mary J. Lewis  
Mary I. Lewis  
667 Vanderbilt Avenue  
Brooklyn, N.Y. 11238

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ASSIGNMENT BY

---

Eric Rose, David Stern, Ann-Marie  
Schmidt and Talia Spanier

TO

The Trustees of Columbia University  
In the City of New York

FOR

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METHOD FOR INHIBITING THROMBOSIS  
IN A PATIENT WHOSE BLOOD IS SUBJECTED  
TO EXTRACORPOREAL CIRCULATION

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Attorney ~~for~~ John P. White

Cooper & Dunham, LLP

1185 Avenue of the Americas  
New York, N.Y. 10036

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212-278-0400

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